

HYDROGEN MANAGEMENT SYSTEM FOR A FUEL CELL

ABSTRACT OF THE DISCLOSURE

Improved containers have therein fuel, such as metal, in contact with an aqueous
5 electrolyte. At least one recombination catalyst separate from the electrolyte is in gas
communication with the container and, in some embodiments, a separate oxygen source
supplies oxygen for the reaction with hydrogen gas. Generally, the recombination
catalyst catalyzes the reaction of hydrogen and oxygen to form water. For example, the
recombination catalyst can be attached to the top of the container, located in a cavity
10 formed in the top of the container, provided to a portion of a vent connected to the
container, or a combination thereof. In some embodiments, the oxygen source can be
ambient air from outside the container or can be supplied from a suitable container.

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